Chapter 7

TRANSPORTATION

INTRODUCTION

It is well known that increased mobility is a stimulant to suburbanization and has a pronounced effect on location of industrial and commercial development. Improved accessibility, which in most rural areas means improved highways, increases land development potential, thereby increasing land values for residential areas. The effect that transportation has on land use dictates that the study of transportation be included in a Comprehensive Plan.

As roadways are the predominate means of transportation in Grant County, roads will be discussed first, followed by rail, bike, air and bus transportation facilities.

ROAD INVENTORY

Grant County's road system consists of federal and state roads maintained by the state, county roads maintained by the Grant County Road Department, and local roads maintained by incorporated cities. Figure 7-1 shows the state-maintained highway system, except state supplemental roads, in Grant County.

Designated Class "AAA" trucking highways have an 80,000 pound permitted gross load limit, while "AA" highways have a 62,000 pound gross load limit. All other state maintained roads are designated as Class "A" trucking highways, with a 44,000 pound gross load limit Figure 7-2 shows trucking classifications for roads in Grant County.

Major highways serving Grant County are Interstate 75, U.S. Highway 25, and Kentucky Routes 22 and 36. Interchanges of Interstate 75, a major north-south highway, are located at Williamstown, Dry Ridge, Crittenden, and Corinth. Interstate 71 is accessible 19 miles north of Williamstown via I-75. Access to Interstate 64 is available 38 miles south of Williamstown via I-75. U.S. Highway 25 is "AAA"-rated (80,000-pound gross load limit) south of Dry Ridge and "AA"-rated (62,000-pound gross load limit) north of Dry Ridge. Kentucky 36 is "AA"-rated from Williamstown to the southeast. Kentucky 22 is "AAA"-rated throughout Grant County.

Figure 7-3 shows major roads maintained by the Grant County Road Department. Roads not maintained by the state or county are maintained by the four incorporated cities.

Figure 7-1 Major State Maintained Roads

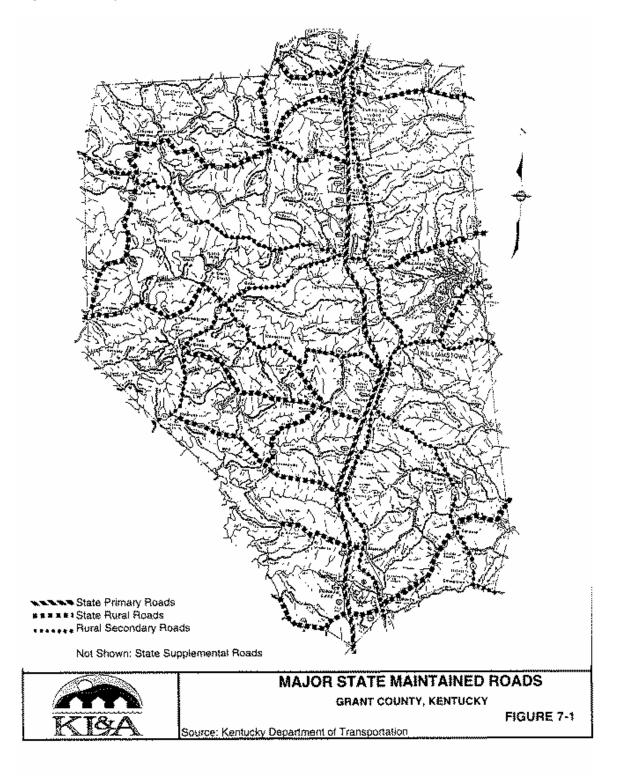
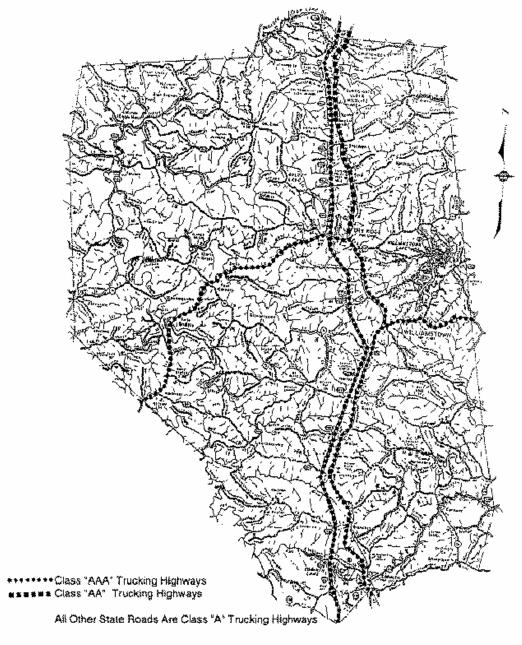


Figure 7-2 Trucking Classifications





TRUCKING CLASSIFICATIONS

GRANT COUNTY, KENTUCKY

FIGURE 7-2

Source: Kentucky Department of Transponation

Figure 7-3 Major County Maintained Roads

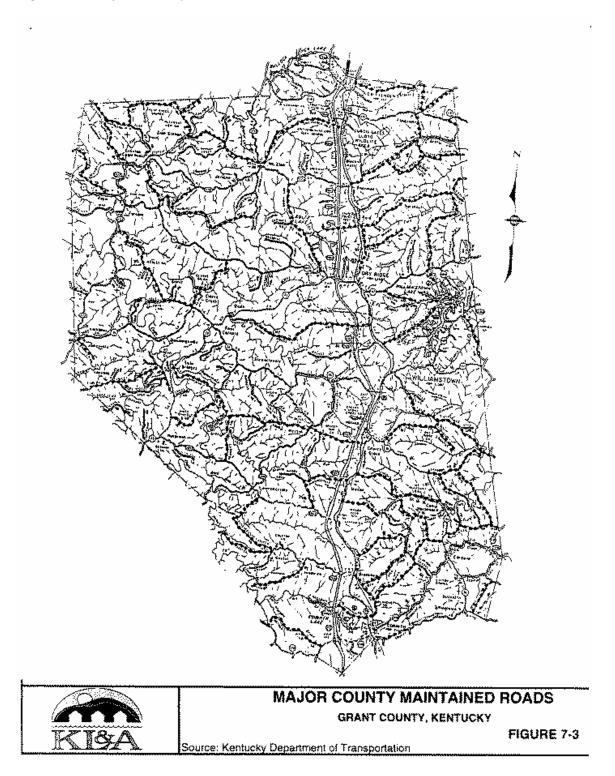
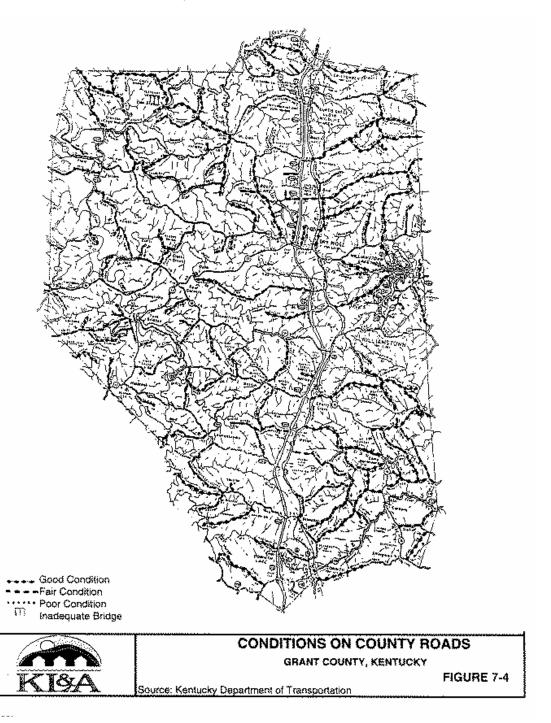


Figure 7-4 Conditions on County Roads



ROAD CONDITIONS

Road conditions refer to both the structural condition of the roads and the condition in relation to the amount and type of traffic that travels the roads. The following criteria may be used to rate the structural condition of the roads in Grant County:

Good Condition - A hard surfaced road with adequate width and good drainage.

<u>Fair Condition</u> - A hard surfaced road with narrow width, poor drainage, and/or minor surface defects.

<u>Poor Condition</u> - A gravel or dirt road or a hard surfaced road with narrow width, poor drainage and/or major surface defects.

Figure 7-4 shows roads considered by the Grant County Roads Department to be in good, fair, or poor condition. In general the structural condition of the paved roads in Grant County is good. However, the width and shoulder configuration of some roads is problematic in relation to traffic levels, posted speed limits, and the winding characteristic of the roadway. KY 22 east of Williamstown to the Pendleton County line and KY 467 throughout the county particularly fit into this category.

Other problems exist on portions of the county's road system, including the presence of gravel roads on part of the county-maintained road system, deteriorating bridges and/or one-lane bridges, traffic congestion, particularly at the KY 22/U.S. 25 intersection in Dry Ridge, and several dangerous railroad crossings.

FUNCTIONAL CLASSIFICATION SYSTEM

Also included within the analysis of existing highway systems is the determination of the function performed by individual facilities within the system. The function of individual facilities ranges from the exclusive traffic-carrying purpose of expressways to the provision of individual land access by local streets. The major road classifications are as follows:

<u>Expressway</u> - A high volume, limited access highway used for through traffic of high speeds and providing no access to abutting land uses.

<u>Arterial</u> - A major road which is used for traffic of moderate to fast speeds with relatively high traffic volumes, between towns of moderate size and nearby larger cities. Access to abutting properties should be limited.

<u>Major Collector</u> - An intermediate road which serves between minor collectors and arterials, and which provides for the major internal movements within a county. Access to abutting properties should be controlled to permit- free movement of traffic within the county.

<u>Minor Collector</u> - A minor road which is important for moving traffic between farm areas and small communities. Access to abutting properties and movement of traffic are equally important on these roadways.

<u>Local Access</u> - The local street system comprises all facilities not in one of the higher systems. These roads are used for traffic of low speed and volume and are primarily designed to provide access and service to abutting properties.

Roads in Grant County are classified as follows:

Expressways:

Interstate 75 is a limited access interstate highway running north-south through Grant County. Its main function is to move traffic through the county and not to give access to abutting land uses.

Arterials:

The major arterial serving the county is U.S. 25, running north-south generally parallel to Interstate 75. This artery provides direct access to I-75 at four interchanges in the county, links the county's four incorporated communities and several unincorporated communities, and is a major link with Lexington to the south and Boone and Kenton Counties to the north. While the structural condition of U.S. 25 is good, effective functioning of this arterial is impaired by several factors. While traffic count data shows that U.S. 25 carries by far the most daily traffic of any road in the county except I-75, there are numerous at-grade railroad crossings along its length. These crossings impede the smooth flow of traffic and, in some cases, create dangerous traffic conditions. In addition, because it is the only north-south arterial in the county, U.S. 25 serves a dual function of (1) linking communities and handling through traffic and (2) providing direct access to numerous residences and businesses. As a result, traffic congestion occurs at numerous points along US 25, with the KY 22/US 25 intersection in Dry Ridge being a particularly congested spot.

Major Collectors:

Major collectors in the county include KY 467, KY 22, and KY 36 from the intersection, with KY 22 southeast to the county line. These are all state maintained roads classified as state secondary roads. KY 467 east of Dry Ridge to the county line also serves as a major collector and alternate route to KY 22. It is classified by the state as a rural secondary road. These roads serve as primary east-west routes through the county and links to communities in neighboring counties. The structural condition of these roads is good, but all are relatively narrow, winding, and generally without adequate shoulders. Curves along KY 22 east of Williamstown are so severe, particularly east of the Grant County line in Pendleton County, that KY 467 has become an alternate route to KY 22. The posted speed limit along these roads is 55 miles per hour, but it is felt that this is excessive in view of design limitations and traffic flow.

Minor collectors:

Minor collectors include the remaining rural secondary roads, which are part of the statemaintained road system (see Figure 7-1). These are: KY 491, KY 1942, KY 1132, KY 2937, KY 2936, KY 1942, KY 1994, KY 489, KY 1995, and KY 330. Most of these roads carry average daily traffic of less than 1,000 vehicles per day and appear to be functioning adequately in their dual role of providing for direct access and traffic movement within the county.

TRAFFIC VOLUME

Traffic volume on roadways is measured by average daily traffic counts. These counts are periodically performed on major state maintained highways by the Kentucky Transportation Cabinet, Division of Planning. Table 7-1 shows average daily traffic counts for 1984 and 1989 at select locations in Grant County. These locations generally include those with an ADT of 1000 or more based on the 1993 estimates of traffic volume. These counts show which roads are the most heavily traveled in Grant County.

TABLE 7-1

grant county average daily traffic counts

Updates provided by the Kentucky Transportation Cabinet by internet at;

http://www.kytc.state.ky.us/planning/Count_Maps/maps/gran36x44.pdf

STA. NO.	LOCATION	1984	1989	1993 ESTIMATES	Actual counts 1995-2000
261	I-75 N. of KY 330 (Corinth Exit)	21,000	22,900	24,600	34,351
251	I-75 N. of KY 36 (Williamstown Exit)	24,600	28,700	27,200	39,014
P23	I-75 N. of KY 22 (Dry Ridge Exit)	24,400	31,000	33,400	48,945
258	U.S. 25 - Scott Co. Line to Keefer Road	788	740	771	1,004
256	U.S. 25 - KY 1993 to KY 36	1,570	2,010	2,330	3,110
A08	U.S. 25 - KY 36 S. to KY 36 N. (Williamstown)	2,800	3,640	4,310	2,645
A07	U.S. 25 - KY 36 N. to KY 22 S. (Williamstown)	4,180	5,090	5,820	6,918
C09	U.S. 25 - KY 467. to KY 22 N. (Dry Ridge)	8,580	11,300	13,500	16,345
006	U.S. 25 - KY 22 N. to Bannister Pike	4,090	4,770	5,170	6,831
035	U.S. 25 - KY 1944 to Mt. Zion- Crittenden Rd.	2,890	3,940	4,570	6,336
038	U.S. 25 - Mt. Zion-Crittenden Rd. to Kenton Co	4,580	5,010	5,710	8,185
504	KY 22 - KY 36 to Ruthman Drive (Dry Ridge)	1,330	1,980	1,980	2,391
C05	KY 22 - KY 467 to I-75 (Dry Ridge)	5,130	7,210	8,870	8,558
C08	KY 22 - I-75 to U.S. 25 (Dry Ridge)	8,100	10,700	12,800	14,428
A05	KY 22 - U.S. 25 to KY 467 (Williamstown)	1,310	1,800	2,190	2,233

A09	KY 36 - I-75 to U.S. 25 (Williamstown)	2,960	3,980	4,800	5,5
255	KY 36 - U.S. 25 to Ashbrook Rd.	1,050	1,430	1,480	1,8
357	KY 36 - Ashbrook Rd. to Turner- Moon Rd.	750	922	1,010	1,2
772	KY 467 - Sipple Rd. to Clarks Creek Rd.	682	972	1,030	1,2
C02	KY 467 - Huff Rd. to Dry Ridge - Mt. Zion Rd.	1,350	1,580	1,760	1,9
C03	KY 467 - Dry Ridge - Mt. Zion Rd. to KY 22	1,890	2,760	3,460	3,5
C10	KY 467 - U.S. 25 to Peaceful Hollow Rd.	1,610	2,260	2,780	2,7
012	KY 467 - Peaceful Hollow Rd. to KY 489	1,160	1,770	1,860	2,2
326	KY 330 - Owen Co. to Jones Lane	845	990	1,080	1,5
263	KY 330 - Morgan Creek to I-75	1,130	1,430	1,570	1,9
260	KY 330 - I-75 to U.S. 25 (Corinth)	1,380	1,720	1,850	2,2
259	KY 330 - U.S. 25 to Layton Chapel Rd.	327	409	425	5
040	KY 491 - Alexander Lane to Violet Rd. (Crit.)	1,130	1,320	1,470	2,6
039	KY 491 - Violet Rd. to U.S. 25 (Crittenden)	3,990	5,180	5,470	8,7
037	KY 491 - U.S. 25 to Mann Rd. (Crittenden)	1,120	1,610	1,730	2,2
036	KY 2942 - KY 1942 to I-75	778	979	1,120	1,6
041	CR 2939 - Eads Road to I-75	1,190	1,570	1,760	
018	Dry Ridge Rd Lemon Northcutt Rd. to US 25	796	1,210	1,350	
A03	Humes Ridge Rd U.S. 25 to Lapine Drive(Wil)	980	1,160	1,300	
A04	Barnes Road - I-75 to U.S. 25 (Williamstown)	997	1,180	1,330	

The Kentucky Transportation Cabinet, Division of Planning, has projected average daily traffic volumes on some major roads in the county. Projected daily traffic figures show that U.S. 25

will continue to carry the greatest amount of traffic (excluding I-75) and that this traffic will increase considerably in the next twenty years. Other roads that are expected to experience a significant increase in traffic volume include KY 22 west of US 25 in Dry Ridge, KY 467 east of US 25 in Dry Ridge, School Drive in Dry Ridge, Barnes Pike in Williamstown, Industrial Road in Williamstown, Helton Road in Williamstown, KY 491 between KY 2363 (Violet Road) and the Boone County line, and KY 36 to Cynthiana. These roadways will require improvements in the future to insure continued or improved efficient functioning.

TRAFFIC ANALYSIS

Another important facet of transportation planning is the analysis of travel patterns in relation to the existing land use. This analysis aids in the determination of future travel projections and the definition of network deficiencies that must be improved to meet future demand. Thus, it becomes necessary to realize that the amount of traffic in Grant County is dependent upon several important factors. These include the population, the amount and location of employment, commercial, and public facilities, and the degree to which automobiles are used.

A most useful method of defining travel patterns is to differentiate between the types of trips that are taken. These can be classified into three main categories:

- 1. External-Internal Trips: Either the origin or destination of the trip is in Grant County, while the other end of the trip is in another county.
- 2. Through Trips: Both the origin and destination of the trip are outside the county.
- 3. Internal Trips: Both the origin and destination of the trip are in Grant County.

The primary avenue for through trips in Grant County is Interstate 75. As can be seen in Table 7-1, the traffic volumes along I-75 far exceed those on other county roads due to the volume of pass through traffic. U.S. 25 is also used by some pass through traffic, but to a much lesser extent. In terms of land use planning, pass through traffic has little impact on the county except in terms of commercial services along the Interstate.

External - Internal trips are of greater importance in terms of planning. This influence is most noticeable in the commuting patterns of residents which indicate that in 1990 some 3,673 residents commuted to areas outside of Grant County to work. Many residents also drive to surrounding counties for shopping and other purposes. Additionally, 862 persons commute into Grant County each day to work. These trends indicate a moderate volume of traffic entering and leaving the county each day. The majority of trips occur on I-75 and U.S. 25 as most commuting traffic travels in a north-south direction to the Northern Kentucky - Cincinnati area and the Greater Lexington area.

Internal trips within the county are the most important category of trips to be considered in the analysis of traffic patterns. The land uses which generate the heaviest traffic volumes are as follows:

- 1. The Williamstown Dry Ridge central business district areas,
- 2. The commercial area at the Dry Ridge intersection with I-75,
- 3. The Dry Ridge industrial facilities,
- 4. Interstate Asphalt in Crittenden,
- 5. The truck stops in at I-75 near Corinth,
- 6. Epperson's landfill near Williamstown.

PLANNED ROAD IMPROVEMENTS

Traffic in Grant County is expected to continue to increase. An increase in population and employment in the county will increase traffic throughout the county, primarily in the north-south corridor along the Interstate 75 and U.S. 25 highways. In addition, as population and employment grow, some traffic increases should be anticipated along the major east-west routes linking Grant County with surrounding communities. It is expected that east-west traffic along the length of KY 22 would increase significantly if this route were straightened, widened and connected to a proposed interchange at I-75 on Barnes Pike.

As Grant County is not within a Metropolitan Planning Area and funding for major road improvements generally comes from Federal and state sources, the Kentucky Transportation Cabinet takes the lead role in planning for transportation improvements in Grant County. Planned improvements are listed in the state's six year plan with the anticipated budget and scheduling information. The following projects are contained in the Kentucky Transportation Cabinet Six Year Highway Plan for Fiscal Years 2000 to 2006:

- 1. Widening of Interstate 75 from four to six lanes I-75 will be widened the entire length of Grant County with work done in sections, Construction from KY 491 north, F.Y. 1997, Construction from KY 491 south, starting in F.Y. 2000.
- 2. KY 467 Straighten curve in the area of Greenville Road east toward KY 489, starting in FY 2002.
- 3. KY 22 relocation from US 25 to I-75 via Barnes Road corridor, starting in FY 2006.
- 4. I-75 Barnes Pike interchange, starting in FY 2002.
- 5. Construct east Dry Ridge connector north and south from KY 467 to KY 22 and US 25, starting in FY 2001.
- 6. KY 330 replace bridge and approaches at CNO&TP railroad, starting in FY 2004
- 7. CR 1228 replace bridge and approaches at Three Forks Creek on Grant/Owen County line, starting in FY 2004.
- US 25 replace bridge and approaches at NS (CNO&TP) railroad and Park Road, starting in FY 2004
- CR 1315 bridge and approaches over Ten Mile Creek and CSX railroad, starting in FY 2006.

The state Six Year Plan is updated every two years. To determine which projects will be included in the Six Year Plan, the State Transportation Planning Department has a list of six criteria used to evaluate transportation needs. The criteria consists of the following:

- 1. Impact on federal, state or local energy use goals, objectives, programs or requirements.
- 2. If the project is an appropriate bicycle facility or pedestrian walkway that can be incorporated into another project.
- 3. Provision of access to airport, riverport, intermodal transportation facility, major freight distribution route, national or state park, recreation or scenic area, monument or historic site, or military installation.

- 4. Compatibility with the transportation needs identified through the MPO planning process in an adjoining urbanized area.
- 5. Impact upon travel and tourism.
- 6. Impact on any state plan developed pursuant to the Federal Water Pollution Control Act. Recently a regional transportation committee has been established to make recommendations for transportation improvements in the Northern Kentucky area in the next Six Year Plan. The updated plan should be completed in 1996.

OTHER NEEDED IMPROVEMENTS

Other projects have been identified in the states long range transportation plans, but are not presently scheduled for construction. These include a diamond interchange at I-75 and Barnes Pike in Williamstown, a realignment of KY 22 from I-75 east to Falmouth in Pendleton County and a railroad underpass at Warsaw Road in Dry Ridge. Consideration will be given to tying in the proposed new I-75 interchange at Barnes Pike to the realignment of KY 22. These three projects have been have been recommended to be included as design scopeing studies in the next update of the six year plan.

U.S. Highway 25

The most critical transportation needs at present and in the foreseeable future concern the traffic handling capacity of U.S. 25 particularly in the Dry Ridge/Williamstown area. At present, local access functions conflict with through-traffic movement. In addition, projected traffic volume increases will exceed the existing capacity of the roadway. At present no alternate local route exists, as U.S. 25 is the only north-south arterial through the county other than limited-access Interstate 75.

The extension of School House Road which now parallels U.S. 25 between Dry Ridge and Williamstown is expected to provide some relief. This road will allow re-routing of traffic to the Grant County schools off of U.S. 25, avoiding the at grade railroad crossing near the schools. It will also provide an alternate route around the railroad crossing on U.S. 25 when a train is present. It will not however, replace U.S. 25 as a main arterial route. Many other traffic problems will remain. It is recommended that other improvements be considered to increase the capacity of the existing roadway. This could be done through minor widening and operational and intersection improvements to improve traffic flow along the U.S. 25 corridor. This approach is termed Traffic System Management (TSM) and could include improvements such as:

- 1. Limitation or prohibition of turning movements,
- 2. Provision of left or right turn lanes,
- 3. Limitation or prohibition of trucks and on-street parking,
- 4. Installation or adjustment of traffic signs and signals, and
- 5. Widening of intersection approach widths.

The Kentucky Transportation Cabinet, District #6 Office, recognizes that U.S. 25 is presently operating at or near its capacity in the Dry Ridge/Williamstown area and is prepared to work with local officials once local consensus on problems and desired solutions is achieved. It is therefore recommended that the Grant County Fiscal Court and the City Councils of Dry Ridge and Williamstown jointly establish a committee to do the following:

- Identify and prioritize traffic problems along the U.S. 25 corridor in the Dry Ridge/Williamstown area.
- 2. Propose general solutions to identified problems and obtain a consensus on desired solutions.
- 3. Approach and work with Kentucky Transportation Cabinet District #6 officials to have a U.S. 25 Corridor Study performed by qualified engineers, recommending a specific course or courses of action to relieve traffic congestion and accommodate future traffic increases on U.S. 25.

Railway Crossings

Railway crossings have a significant impact on traffic flow and safety at a number of points along or near the U.S. 25 corridor. Various ongoing community efforts to improve conditions at these crossings have resulted some closings and others are under consideration. As traffic increases in the county generally and along U.S. 25 particularly, the impact of the railroad crossing impediments on traffic will increase. Because coordination of county and railway objectives has been difficult to achieve, it is recommended that the Fiscal Court appoint a Railway Task Force to address this problem. The Task Force should be charged with:

- 1. Identifying and prioritizing county concerns related to the location and operation of the railway in the county;
- 2. Working with representatives of Southern Railway and state and local government and business leaders;
- 3. Developing alternative solutions to identified problems and presenting these to the fiscal court and others for resolution.

New Road Design Standards

One way to avoid future road problems is to provide properly designed new roads to handle expected future traffic volumes. Design standards for new roads in subdivisions are considered adequate at the present time. These standards are also being applied in mobile home park developments.

Locally Identified Projects

Other projects which are not part of the Kentucky Transportation Cabinet's six year plan but have been identified by Grant County residents as needed and desired include:

- 1. Construction of a service road and proposed railroad crossing improvements at Old Lexington Pike north of Dry Ridge to serve Grant County Foods and relieve U.S. 25 of some truck travel.
- 2. Construction of a service road to serve the Dry Ridge industrial park and relieve U.S. 25 of some truck travel.
- 3. Construction of a connector from U.S. 25 to KY 22 to bypass the US 25/KY 22 intersection (to the northwest) in Dry Ridge and addition of a traffic signal.
- 4. Elimination of the earthen mounds at the I-75 exit in Williamstown to provide better sight distance at the exit ramp and to promote development at that location.
- 5. Extension of KY 22, through the industrial park in Dry Ridge, to connect with KY 467.
- 6. Placement of a traffic light at KY 22 and Blackburn Lane in Dry Ridge.

7. Widening of the Mt. Zion-Crittenden Road from Crittenden at least to Mt. Zion.

COUNTY ROADWAY IMPROVEMENTS

The existing road network is in need of improvements to better handle current and projected traffic in the county. These needs range from surfacing existing gravel roads, to road widening, to routine maintenance of roads currently in good condition. The county presently has no systematic method of inventorying conditions on the county-maintained road system nor of scheduling needed improvements and maintenance. Development of a County Road Management Plan is therefore recommended to include the following:

- 1. Regularly updated inventory of road conditions.
- 2. Establishment of criteria for prioritizing road improvement projects and routine maintenance. Examples of relevant criteria are functional characteristics of the road (a major arterial would rank higher than a minor collector), total traffic volume, and severity of conditions of deterioration.
- 3. Integration of road improvement projects into a multi-year county capital improvements program.
- 4. Yearly review of prioritized road improvement projects and scheduled maintenance work.
- 5. A plan to redesign and realign county roads.

Access Management

Another category of roadway improvements, related to traffic system management improvements, are access management guidelines. Roadways serve a dual function of facilitating traffic movement and giving access to abutting properties. Where those two functions conflict, roadway design capacity will not be achieved and congestion and increased traffic accidents will result. The primary examples of this type of conflict are US 25 and KY 22 in the Williamstown/Dry Ridge area.

Access to local streets is regulated solely by local government. Access to state-maintained highways is jointly regulated by state and local government. The Kentucky Transportation Cabinet must authorize new access points (or curb cuts) onto state-maintained roadways from abutting properties. Its standards are, in effect, minimum standards, since local government may not approve access denied by the state. However, local government may establish and enforce its own more stringent, access standards through its zoning and subdivision regulations.

Access management guidelines help assure that a roadway will operate at its design capacity by identifying factors that need to be considered when access points from individual properties to a roadway are approved. Along arterials and major collectors, for example, driveways should be kept at a minimum. Measures that should be considered as part of access management include provision for:

- 1. Parallel service roads
- 2. Frontage roads
- 3. Interconnected parking lots
- 4. Shared driveways
- 5. Limitation on turning movements (especially left turns)

6. Limitations on new access points for subdivisions

It is recommended that the Grant County Fiscal Court and the City Councils of Dry Ridge and Williamstown commission a study to develop access management recommendations for the U.S. 25 and KY 22 Corridors in the Dry Ridge/Williamstown area, and any other areas as judged necessary. This study may be conducted in conjunction with the U.S. 25 Corridor Study, recommended above. Recommended guidelines would be submitted to the respective legislative bodies for consideration and adoption as part of each legislative body's zoning regulations.

RAILROAD TRANSPORTATION

Two Class I railroads are located in Grant County. The CSX Railroad crosses the northwest corner of Grant County but does not provide services directly to Grant County. The Norfolk Southern Railroad (NSRR) operates its main north-south lines through Grant County, from the Boone County line to the Scott County line and parallel to U.S. Highway 25. The railroad links Grant County to Cincinnati to the north, and Atlanta and Knoxville to the south and provides the county with main line services. They provide switching services, daily freight service six days a week, team track space for 6 cars at Williamstown, 16 cars at Dry Ridge and 10 cars at Crittenden. They also operate the nearest intermodal facility which is located at Georgetown, Kentucky, 32 miles south of Williamstown. There is no passenger service in the area. The level of rail service within the planning period should be sufficient to cover any additional demand brought by future industrial expansion. Rail sidings can be provided to new industries, since most industrial sites in the county lie directly along the route of the Southern Railroad lines.

Due to NSRR's close location to U.S. 25, there are a great number of grade crossings for local traffic. These grade crossings are always a potential danger to the public. To minimize the these dangers, efforts must be made to improve the existing grade crossing safety by the installation of gates and flashing lights whenever possible and to improve approach roads to insure proper sight distances.

As development occurs in Grant County, the volume of traffic using existing grade crossings will increase significantly, as will the potential hazards. Pressures for the creation of new grade crossings will also develop. To insure that safety is improved as Grant County develops, the following two (2) items must be accomplished:

- 1. When development occurs adjacent to the NSRR and the traffic that will access the development must cross the NSRR at some point to access U.S. Highway 25, there must be constructed, as part of all these developments a road generally parallel to the NSRR for the entire length of the development. This road must be constructed to the collector road specifications. The long-term effect of this policy will be the development of a frontage road system paralleling the NSRR. This will enable the development of grade crossings meeting current safety standards, minimizing the number of grade crossings, and, if traffic volumes warrant, the construction of grade separations.
- 2. When new grade crossings are approved, an effort shall be made to consolidate existing grade crossings into the new one. This will help reduce the number of crossings and will have traffic crossing at a grade crossing constructed to current safety requirements.

BIKES AND BIKEWAY TRANSPORTATION

Over the past few years, the use of bicycles as a viable means of transportation has shown a substantial increase. This trend involves bicycle usage by all ages for employment,

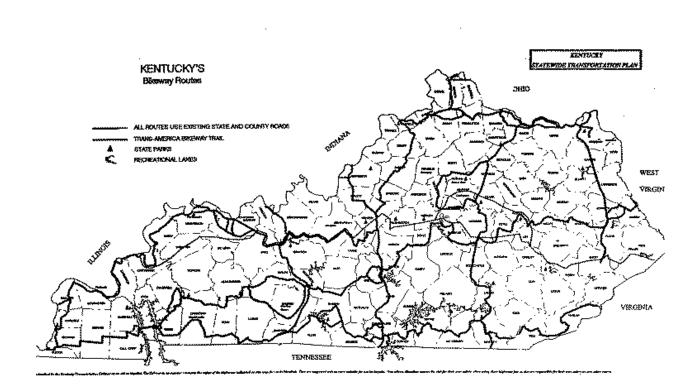
recreational, and educational trips. Accompanying this increased usage has also been the desire for improved bikeway facilities to make bike trips as safe as possible, since most trips must occur within existing roads and roadway networks. This overall trend is seen as a very desirable addition to most communities.

Kentucky's Statewide Transportation Plan identifies two bikeway routes which cross Grant County east to west in the northern part of the county. The northern most route follows KY 491 crossing I-75 at Crittenden. An alternate route follows KY 467, crossing I-75 at Dry Ridge. These routes run along existing state and county roads which have not been improved to add bike lanes. It is the state's goal to improve designated bikeway routes across Kentucky to increase safety and use of the routes.

The development of bikeways must be carefully coordinated with the existing road network and traffic volumes to provide safe facilities for both biker and motorist. The safest bikeway is a bicycle trail, which is separated from the roadway and is devoted solely to bike travel. Bike trails should be used in areas where heavy traffic volumes exist and large numbers of cyclists are expected. Other possible facilities are bicycle lanes and shared roadways, which occupy space on the existing roadway. Bicycle lanes are located adjacent to an existing lane or curb, while cyclists occupy the existing roadway on a shared bikeway system. These two methods should only be used in areas of low traffic volume, thus reducing the possibility of hazardous conditions to cyclists. In addition, the availability of usable rights-of-way for bikeways must also be a consideration. There is an increasing demand for bike routes and this trend is expected to continue in the future. Bike paths and routes should be considered as part of future road and park improvements.

Figure 7-5 Kentucky Bikeway Routes

FIGURE 7-5



AIR TRANSPORTATION

There are no airports located in Grant County. The nearest small craft airport is the Gene Snyder Airport located in Pendleton County, three miles south of Falmouth and 21 miles east of Williamstown. The Gene Snyder Airport has one paved runway, 4,000 feet long which is lighted with Beacon lights from dusk to dawn. Landside facilities at the airport include one hangars, tie-downs, fuel and repair services. The Statewide Transportation Plan has identified needed improvements at this airport including extension of the runway, apron construction, sealing of the runway, apron and taxiway and additional T-hangers. The estimated cost of these improvements is approximately 3.8 million dollars.

The nearest scheduled commercial airline service is available at the Greater Cincinnati/Northern Kentucky International Airport. It is located eight miles southwest of Covington, Kentucky and 34 miles north of Williamstown. The Northern Kentucky Airport has under gone a major expansion and upgrading project in recent years, making it a major national hub airport.

As the demand for air services in the region has continued to grow, the need for additional and improved regional airports has increased. If this trend continues, the development of a satellite airport in Grant County should be considered. Such an airport would enhance the county's economic development efforts.

BUS SERVICE

Rural public transportation, in the form of van service, is provided in Grant County through Northern Kentucky Transit. Senior citizens and handicapped persons are served free of charge. Others pay a nominal fee. Intra-county service is provided through daily routings throughout the county. Inter-county service between Grant County and the metropolitan area to the north is provided twice weekly by Senior Citizens of Northern Kentucky, under contract with Northern Kentucky Transit. There are no income or other qualifications for this public service.